



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Award Contract for Five Compressed Natural Gas (CNG) Buses (\$1,764,042)

MEETING DATE: September 15, 1999

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt the attached resolution awarding the contract for five CNG buses to North American Bus Industries (NABI), of Moorpark, California, in the amount of \$1,764,042, and appropriate funds in accordance with the recommendation shown below.


BACKGROUND INFORMATION: On April 7, 1999, the City Council approved the specifications and advertisement for bids for five, 35-foot compressed natural gas (CNG) buses. However, given our history of ridership increases, we are concerned that the 35-foot, 28-seat buses would be too small for the GrapeLine. The life expectancy of these heavy-duty transit buses is 12 years. Thus, we need to allow "room" for growth. The 40-foot models can seat 36 and are \$5,000 less per bus. However, fuel savings easily offset this cost. The low-floor model will allow for senior citizens, the disabled, and mothers with children to board the GrapeLine buses with greater ease. It will reduce the incidences of falls on the GrapeLine, and help the drivers stay on schedule when they board wheelchair users. Currently, each wheelchair boarding requires ten minutes.

Drawings and dimensions of the buses are shown in Exhibit A. The additional 5-foot length is between the wheels, requiring a longer turning radius, which is of some concern. However, our greatest concern is the appearance of large buses with few passengers. To check this, we asked our contract operator, Laidlaw, to conduct some studies. The results of these ridership studies are shown in Exhibit B. The ridership figures show the maximum number of passengers on the bus at any one time during a run. Both average and peak figures for the study's observations are shown. Obviously, when the number exceeds the number of seats, riders are standing. The table also shows a "capacity" figure established by the Council of Governments for use in evaluating transit operations and purchases of buses. The capacity is 70% of the total number of seats to allow for peak variations and to minimize the number of people who would have to stand. If we used those capacity figures, there is no question that we should purchase the 40-foot, 36-passenger buses. However, this figure was developed based on operations of SMART which has much longer runs than Lodi's GrapeLine.

Overall ridership on the GrapeLine continues to increase. In fiscal year 1997/98, we carried 234,548 passengers. Last year this figure was 356,353. Quarterly increases during the last year were about 7% each quarter. It appears the current quarter will be 6% over the previous quarter. With increased service demand anticipated with the new Multimodal Station, this rate of increase could sustain itself for some time to come, although it will eventually stabilize.

Since costs are so similar, the bottom line on the decision of which size bus to purchase is weighing passenger convenience at peak times against the public perception of having large buses running with only a few people during slack times. While staff is very concerned about this adverse perception, we

APPROVED: _____


H. DIXON FLYNN -- CITY MANAGER

feel it is appropriate to favor the riders. Doing so will help encourage ridership, thereby reducing the number and mileage of private vehicles being driven which will provide air quality benefits. An alternative would be to purchase a mixture of 40-foot and 35-foot buses (see Exhibit C).

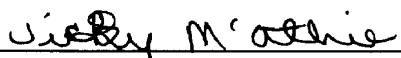
The reason the City of Lodi is able to purchase these heavy-duty, state-of-the-art buses with supplemental grant funds is because they operate on CNG. It was clear two years ago that to acquire excellent buses for the GrapeLine, they had to be alternatively fueled. Conventional diesel buses do not score well under the various competitive funding pots available. Nearly all of the funding comes from the competitive process: FTA's Congestion Mitigation and Air Quality Program (CMAQ), and the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Heavy-Duty Motor Vehicle Emission Reduction Incentive Program (HDMVERIP). Our Transportation Manager, Carlos Tobar, has done an excellent job obtaining these grants and should be commended.

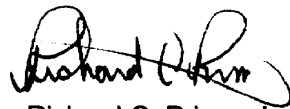
Our recommendation also includes purchasing the buses through another contract rather than seeking our own bids. The City of Phoenix prepared bus specifications similar to the one Lodi had prepared and received excellent bids from various bus manufacturers because of their large procurement. The City of Phoenix can assign its contract to the City of Lodi so we can acquire the buses. It is to the City of Lodi's benefit to have the City of Phoenix assign their contract to us in order to save a great deal of staff time, secure a great price, and acquire the buses much sooner. Even so, it will take a year to obtain the buses.

Finally, we are working on specifications for a 40-foot, high-floor CNG trolley bus. The seating capacity will be 41 passengers, and the estimated cost is \$250,000. CMAQ and Air District funds will be used.

FUNDING: Requested Appropriation: FTA (CMAQ) \$1,520,000
SJVAPCD (HDMVERIP) \$ 280,000

Funding Available:

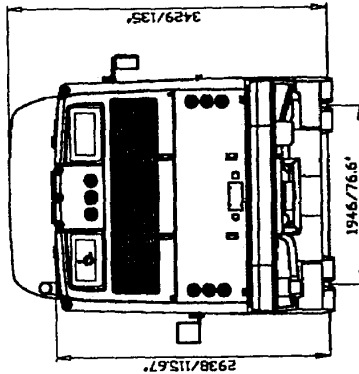
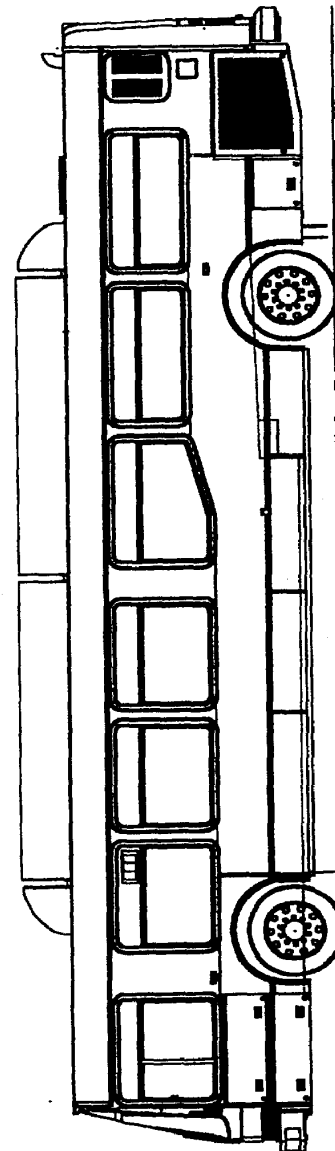
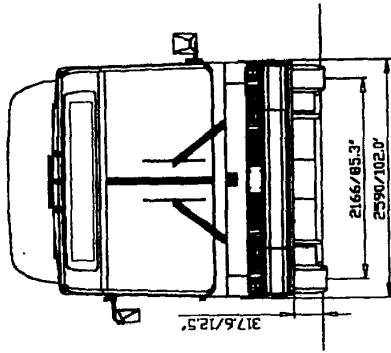
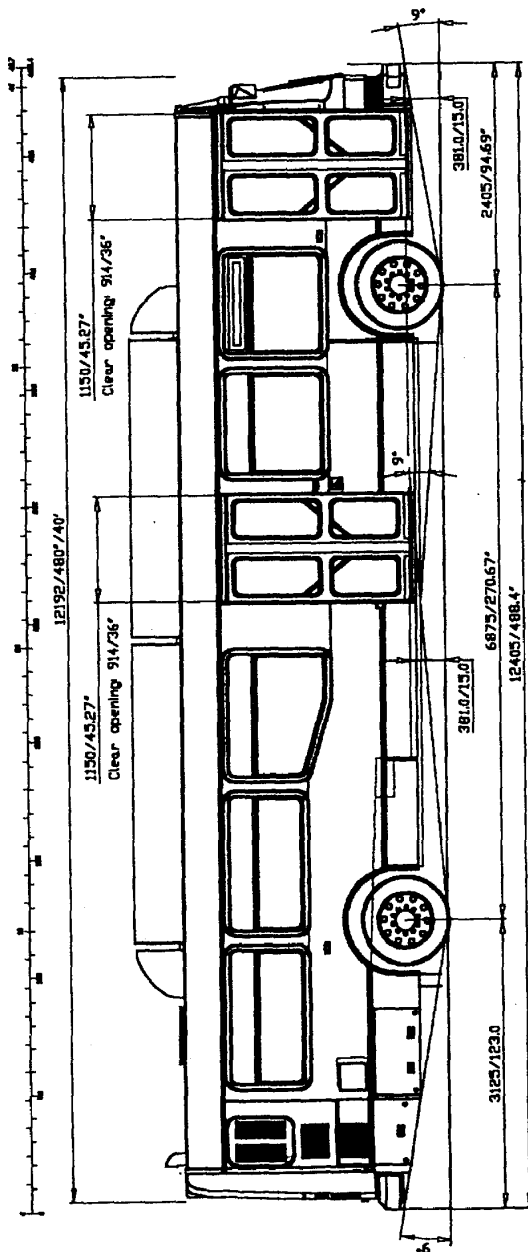

Finance Director


Richard C. Prima, Jr.
Public Works Director

RCP/CFT/lm

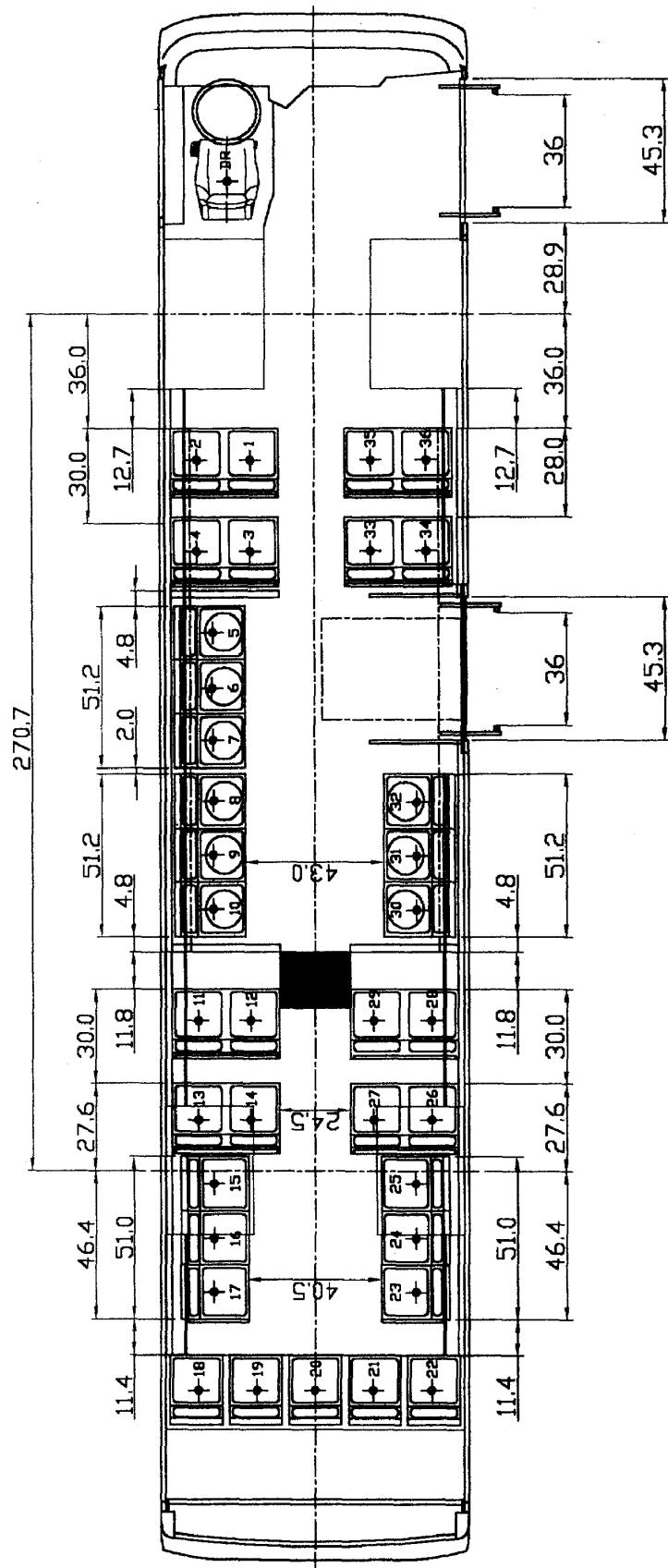
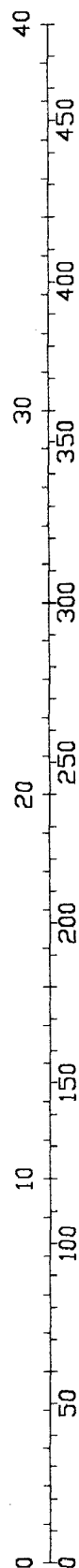
Attachments

cc: City Attorney
Purchasing Officer
Transportation Manager
Fleet and Facilities Manager



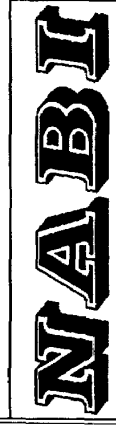
CNG
NABI 40 LEW BUS - PHOENIX
(99-202)

NABI	Date: May 17, 1999	ELEVATION DRAWING	
	Made by: Eva Almasi	Approved:	Drawing number: 100-A307-A01



LNG/CNG BUS
 NABI 40 LFW BUS - PHOENIX
 (99-202)

36 PASSENGER SEATS, HTK. min. 28.5"

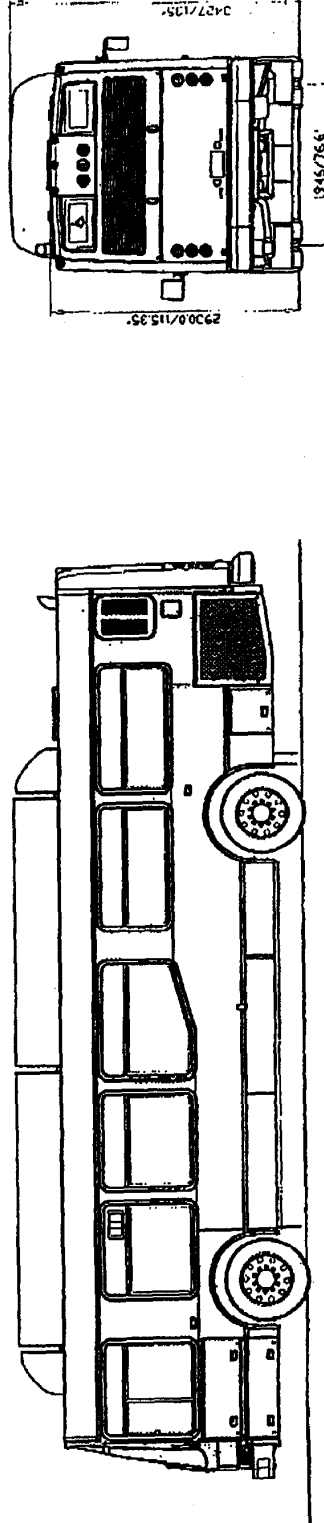
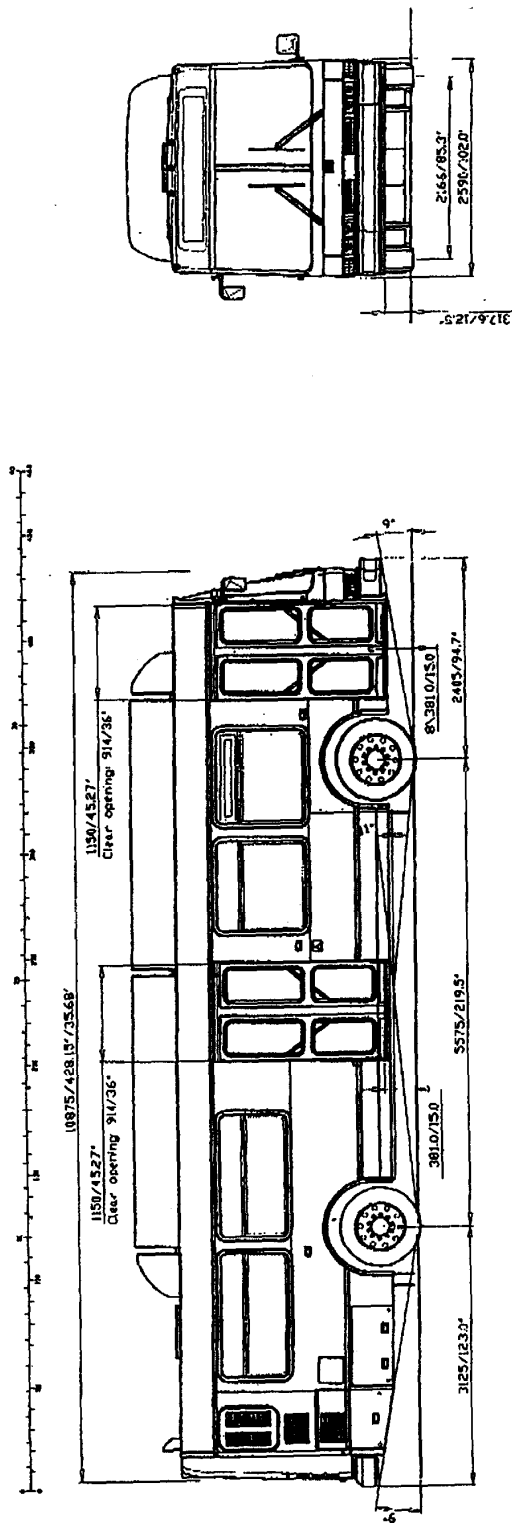


Date: May 19, 1999

Create by: Éva Almási
 Approved by:

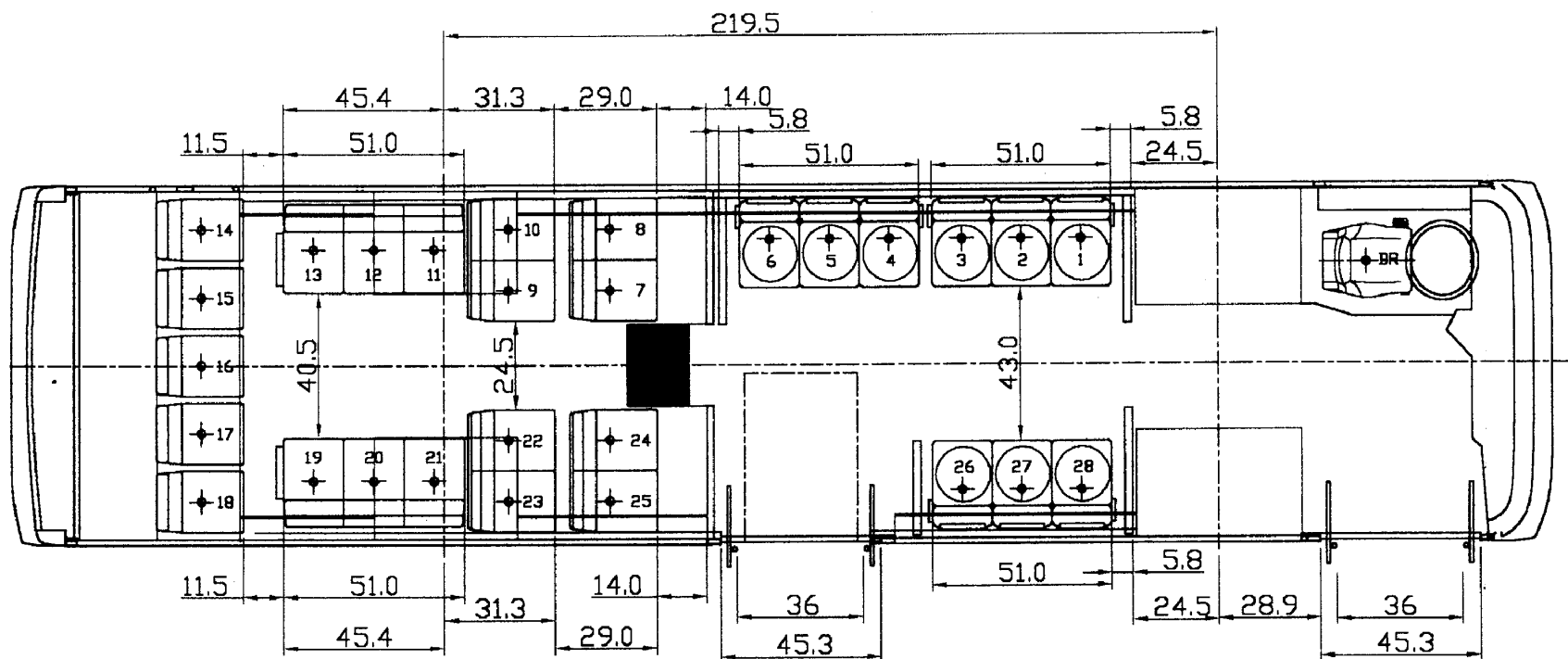
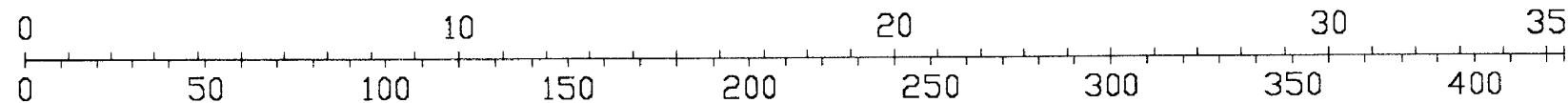
SEATING LAYOUT

Drawing number: 111-A308-A01



CNG BUS
NABI 35 LEW BUS - PHOENIX
(99-202)

NABI		Date: May 19, 1999	ELEVATION DRAWING	
Made by: Éva Almási		Approved:	Drawing number:	100-A310-A01



DIESEL/CNG/LNG BUS
NABI 35 LEW BUS – PHOENIX
(99-202)

28 PASSENGER SEATS, HTK: min. 26.5"

NABI

Date: May 19, 1999

SEATING LAYOUT

Create by:
Éva Almási

Approved by:

Drawing number:

111-A312-A01

GrapeLine Average Maximum Loads: Most amount of people on a given run at one time.

Time	Rt. 1		Rt. 2		Rt. 3		Rt. 4		Rt. 5	
	Average	High	Average	High	Average	High	Average	High	Average	High
615	2	3	5	8	3	4	4	5	3	4
700	12	18	24		22		26	27	5	6
745			16	21	22		3	5	10	11
830	7	14	6	13	5	7	4	6	2	5
915	8	9	10	18	5	7	4	5	9	11
1000	8	13	13	16	4	6	8	12	4	7
1045	14	27	12	15	3	5	12	15	6	8
1130	15	20	18	27	7	12	9	11	12	13
1215	13	17	14	25	11	13	10	14	10	15
100	16	20	10	20	7	9	3	5	22	25
145	10	13	15	19	26	28	25		11	11
230	13	16	11	15	6	9	8	9	17	17
315			14	25	22	25	8	10	16	22
400	15	20	15	20	12	14	12	14	11	11
445	10	15	13	15	4	4	9	13	14	18
530	8	12	8	9	3	3	8	10	6	10
615	5	7	5	6	2	2	4	5	3	5
Average/run	13	17	12	18	10	12	9	12	9	12

Exceeds 28

Exceeds 20, less than 28

35' bus, 28 seats
40' bus, 36 seats

"Capacity" @ 70%
20
25

Notes:

1. The number of GrapeLine passengers on a given run far exceeds the average maximum load. For routes 1 and 2 the average ridership, per run, is 24 passengers.
2. Results of 2 to 4 days of sampling during summer 1999. School not in session for Rt. 5.

MaxLoad

EXHIBIT B

EXHIBIT C

Option 1	<u>Unit Cost</u>	<u>Total Cost</u>
5 40-foot, low-floor CNG	\$328,871	\$1,644,355

Option 2

3 40-foot, low-floor CNG	\$328,871	\$ 986,613
2 35-foot, low-floor CNG	\$333,494	<u>\$ 666,988</u>
Total Cost		\$1,653,601

Option 3

5 35-foot, low -floor CNG	\$333,494	\$1,667,470
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Prices do not include sales tax.

Funding		Purchase (including sales tax)	
Air District	\$ 282,000		
CMAQ 98/99	\$ 929,565		
CMAQ 99/00	\$ 780,000	5 40-foot, low-floor CNG	\$1,764,042
Formula	<u>\$ 40,302</u>	1 high-floor Trolley	<u>\$ 267,825</u>
Total	\$2,031,867	Total	\$2,031,867

RESOLUTION NO. 99-140

A RESOLUTION OF THE LODI CITY COUNCIL AWARDING THE
CONTRACT FOR FIVE COMPRESSED NATURAL GAS (CNG)
BUSES AND APPROPRIATING FUNDS FOR THIS PURCHASE

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WHEREAS, Lodi Municipal Code, §3.20.070, authorizes dispensing with bids for purchases of supplies, services or equipment when it is in the best interest of the City to do so; and

WHEREAS, on April 7, 1999 the City Council approved the specifications and advertisement for bids for five, 35-foot compressed natural gas (CNG) buses; and

WHEREAS, given the City's history of ridership increases, staff is concerned that the 35-foot, 28-seat buses would be too small for the Grapeline, and the life expectancy of these heavy-duty transit buses is twelve years; and

WHEREAS, 40-foot models can seat 36 and are \$5,000 less per bus, and the low-floor model allows senior citizens, the disabled, and mothers with children to board the Grapeline buses with greater ease; and

WHEREAS, the City is able to purchase these heavy-duty, state-of-the-art buses with supplemental grant funds because they operate on CNG; and

WHEREAS, staff recommends purchasing the buses through an assignment of a contract through the City of Phoenix, from North American Bus Industries of Moorpark, California in the amount of \$1,764,042.

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council hereby approves the purchase of five CNG buses through the assignment of a contract through the City of Phoenix, from North American Bus Industries of Moorpark, California in the amount of \$1,764,042; and

BE IT FURTHER RESOLVED, that funds be appropriated as follows to cover this purchase:

FTA (CMAQ)	\$1,520,000
SJVAPCD (HDMVERIP)	\$ 280,000

Dated: September 15, 1999

I hereby certify that Resolution No. 99-140 was passed and adopted by the City Council of the City of Lodi in a regular meeting held September 15, 1999, by the following vote:

AYES: COUNCIL MEMBERS – Mann, Nakanishi and Land (Mayor)

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – Hitchcock

ABSTAIN: COUNCIL MEMBERS – Pennino


ALICE M. REIMCHE
City Clerk